State of Utah Administrative Rule Analysis

NOTICE OF CHANGE IN PROPOSED RULE

The agency identified below in box 1 provides notice of proposed rule change pursuant to *Utah Code* Sections 63-46a-4. Please address questions regarding information on this notice to the agency. The full text of all rule filings is published in the *Utah State Bulletin* unless excluded because of space constraints. The full text of all rule filings my also be inspected at the Division of Administrative Rules

4.	Purpose of the rule or reason for	or the change:				
4	Changes original proposed rule file no.:				29078	
3.	Type of notice: Change in Proposed Rule					
	Statewide Amendments to the IBC					
2.	Title of rule or section (catchline	e):				
	(Interested persons may inspect this adminis	strative rule at the above addres	s or at DAR between 8	:00 a.m. and	1 5:00 p.m. on business days.)	
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	Room no.:					
1.	Agency:	Commerce/Division of Occupational and Professional Licensing				
Chan	ged to Admin. Code Ref. (R no.):					
Utah	Admin. Code ref. (R no.):	R156-56-704	Time filed:			
DAR	t file no:		Date filed:			
	Division of Administrative Rules.					

Following a public rule hearing conducted on November 15, 2006, the Division and the Uniform Building Code Commission are proposing these additional changes. At the public hearing comments were made that the proposed rule amendment needed some further technical clarification regarding the requirement for closed parking garages and that the requirement to have a sprinkler system in all open parking garages over 5,000 square feet seemed to be unnecessary and expensive overkill in many instances. The reason for the original rule amendment was explained that many parking garages do not have adequate fire department vehicle or equipment access to fight a fire that may occur in a vehicle. It was suggested that the sprinkler requirements be imposed only in open parking garages which do not have reasonable access to fire department equipment rather than to all garages over 5,000 square feet. The Uniform Building Code Commission and their fire committee agreed to this change in proposed rule amendment. This change in proposed rule amendment changes the requirement that the sprinkler system be required if the open parking garage is over 5,000 square feet to only require the sprinkler in open garages if the fire department does not have reasonable access (within 150 feet from any point in the garage) or if the building does not have a Class 1 standpipe. This change in proposed rule amendment also clarifies the requirement for a sprinkler system which is required in all parking garages that are enclosed. This is not a change from prior requirements but the newly added language seemed to confuse the requirement for closed garages. This change in proposed rule amendment incorporates changes in the fire code requirements that are also being proposed by the State Fire Marshal. The Uniform Building Code Commission does not have authority over the fire codes; however, the Commission does correlate building codes to fire code requirements to eliminate confusion of what may be allowed in a building.

5. This change is a response to comments from the Administrative Rules Review Committee.

Yes ; No XX

6. Summary of the rule change:

Paragraphs (23) and (24) regarding Sections (F)903.2.9 and (F)903.2.9.1 are amended consistent with the reasons expressed above to change the requirement for automatic sprinkler systems in open garages which do not have adequate access to fire fighting resources and to coordinate with requirements proposed by the State Fire Marshall. Paragraph (51), the reference to Section 2306.1.5 is corrected. The remaining paragraph numbers in the rule have been renumbered to reflect the addition of paragraphs (23) and (24) regarding the parking garage amendments.

7. Aggregate anticipated cost or savings to:

A) State budget:

No additional costs or savings are anticipated beyond those previously identified in the original proposed rule amendment filing as a result of this change in proposed rule amendment. This amendment may, however, result in substantially lower costs than originally proposed.

B) Local government:

No additional costs or savings are anticipated beyond those previously identified in the original proposed rule amendment filing as a result of this change in proposed rule amendment. This amendment may, however, result in substantially lower costs than originally proposed.

C) Other persons:

No additional costs or savings are anticipated beyond those previously identified in the original proposed rule amendment filing as a result of this change in proposed rule amendment. This amendment may, however, result in substantially lower costs than originally proposed.

8. Compliance costs for affected persons

("person" means any individual, partnership, corporation, association, governmental entity, or public or private organization or any character other than an agency):

No additional costs or savings are anticipated beyond those previously identified in the original proposed rule amendment filing as a result of this change in proposed rule amendment. This amendment may, however, result in substantially lower costs than originally proposed.

9. Comments by the department head on the fiscal impact the rule may have on businesses:

	This change in proposed rule contains an amendment regarding sprinklers in parking garages over 5,000 square feet. The State Fire Marshall's office intends to make a similar rule filing. Other than a cost in building these parking garages, no additional fiscal impact to businesses is anticipated. Francine A. Giani, Executive Director						
10.	This rule change is authorized or mandated by state law, and implements or interprets the following state and federal laws. State code or constitution citations (required):						
	Section 58-56-1 and Subsections 58-1-106(1)(a), 58-1-202(1)(a), 58-56-4(2) and 58-56-6(2)(a)						
11.	This rule adds, updates, or otherwise changes the following titles of materials incorporated by references (a copy of materials incorporated by reference must be submitted to DAR; if none, leave blank):						
The public may submit written or oral comments to the agency identified in box 1. (The public n request a hearing by submitting a written request to the agency. The agency is required to hold a hearing receives requests from ten interested persons or from an association having not fewer than ten member Additionally, the request must be received by the agency not more than 15 days after the publication or rule in the <i>Utah State Bulletin</i> . See Section 63-46a-5 and Rule R15-1 for more information.)							
	A) Comments will be	A) Comments will be accepted until 5:00 p.m. on (mm/dd/yyyy): 03/19/2007					
	B) A public hearing	(optional) will	be held:				
	on (mm/dd/yyyy):		at (time):		At (place):		
13.	This rule change may	y become effec	ctive on (mm/dd/y	ууу):	03/27/2007		
	NOTE: The date above is the date on which this rule MAY become effective. It is <i>NOT</i> the effective date. After the date designated in Box 12(A) above, the agency <i>must</i> submit a Notice of Effective Date to the Division of Administrative Rules to make this rule effective. Failure to submit a Notice of Effective Date will result in this rule lapsing and will require the agency to start the rulemaking process over.						
14.							
	contractors			building codes			
	building inspection			licensing			
15.	Attach an RTF document (filename):	ment containi	ng the text of this	rule change	R156-56.cpr		
forms		agency for co			-4, 5, 6, and 10. Incomplete in the <i>Utah State Bulletin</i> , and		
		AGE	NCY AUTH	ORIZATION			
Agen and t	cy head or designee, itle:	F. David Stan	lley, Director	Date (mm/dd/yyyy):	01/17/2007		
					ChangeInProposedRule.doc 9/26/200		

R156. Commerce, Occupational and Professional Licensing. R156-56. Utah Uniform Building Standard Act Rules. R156-56-704. Statewide Amendments to the IBC.

The following are adopted as amendments to the IBC to be applicable statewide:

- (1) All references to the ICC Electrical Code are deleted and replaced with the National Electrical Code adopted under Subsection R156-56-701(1) (b).
- (2) Section 101.4.1 is deleted and replaced with the following:
- 101.4.1 Electrical. The provisions of the National Electrical Code (NEC) shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.
- (3) Section 106.3.2 is deleted and replaced with the following:
- 106.3.2 Previous approval. If a lawful permit has been issued and the construction of which has been pursued in good faith within 180 days after the effective date of the code and has not been abandoned, then the construction may be completed under the code in effect at the time of the issuance of the permit.
 - (4) In Section 109, a new section is added as follows:
- 109.3.5 Weather-resistive barrier and flashing. An inspection shall be made of the weather-resistive barrier as required by Section 1403.2 and flashing as required by Section 1405.3 to prevent water from entering the weather-resistant exterior wall envelope.

The remaining sections will be renumbered as follows:

- 109.3.6 Lath or gypsum board inspection
- 109.3.7 Fire-resistant penetrations
- 109.3.8 Energy efficiency inspections
- 109.3.9 Other inspections
- 109.3.10 Special inspections
- 109.3.11 Final inspection.
- (5) Section 114.1 is deleted and replaced with the following:
- 114.1 Authority. Whenever the building official finds any work regulated by this code being performed in a manner either contrary to the provisions of this code or other pertinent laws or ordinances or dangerous or unsafe, the building official is authorized to stop work.
- (6) In Section 202, the definition for Assisted Living Facility is deleted and replaced with the following:
 - ASSISTED LIVING FACILITY. See Section 308.1.1.
 - (7) Section 305.2 is deleted and replaced with the

following:

305.2 Day care. The building or structure, or portion thereof, for educational, supervision, child day care centers, or personal care services of more than four children shall be classified as a Group E occupancy. See Section 421 for special requirements for Group E child day care centers.

Exception: Areas used for child day care purposes with a Residential Certificate, Family License or Family Group License may be located in a Group R-2 or R-3 occupancy as provided in Section 310.1 or shall comply with the International Residential Code in accordance with Section 101.2.

Child day care centers providing care for more than 100 children 2 1/2 years or less of age shall be classified as Group I-4.

(8) In Section 308 the following definitions are added: 308.1.1 Definitions. The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

TYPE I ASSISTED LIVING FACILITY. A residential facility licensed by the Utah Department of Health that provides a protected living arrangement for ambulatory, non-restrained persons who are capable of achieving mobility sufficient to exit the facility without the assistance of another person.

TYPE II ASSISTED LIVING FACILITY. A residential facility licensed by the Utah Department of Health that provides an array of coordinated supportive personal and health care services to residents who meet the definition of semi-independent.

SEMI-INDEPENDENT. A person who is:

- A. Physically disabled but able to direct his or her own care; or
- B. Cognitively impaired or physically disabled but able to evacuate from the facility with the physical assistance of one person.

RESIDENTIAL TREATMENT/SUPPORT ASSISTED LIVING FACILITY. A residential treatment/support assisted living facility which creates a group living environment for four or more residents licensed by the Utah Department of Human Services, and provides a protected living arrangement for ambulatory, non-restrained persons who are capable of achieving mobility sufficient to exit the facility without the physical assistance of another person.

- (9) Section 308.2 is deleted and replaced with the following:
- 308.2 Group I-1. This occupancy shall include buildings, structures, or parts thereof housing more than 16 persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. The occupants are capable of

responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following: residential board and care facilities, type I assisted living facilities, residential treatment/support assisted living facility, half-way houses, group homes, congregate care facilities, social rehabilitation facilities, alcohol and drug centers and convalescent facilities. A facility such as the above with five or fewer persons shall be classified as a Group R-3 or shall comply with the International Residential Code in accordance with Section 101.2. A facility such as above, housing at least six and not more than 16 persons, shall be classified as a Group R-4.

- (10) Section 308.3 is deleted and replaced with the following:
- 308.3 Group I-2. This occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing or custodial care on a 24-hour basis of more than three persons who are not capable of self-preservation. This group shall include, but not be limited to the following: hospitals, nursing homes (both intermediate care facilities and skilled nursing facilities), mental hospitals, detoxification facilities, ambulatory surgical centers with two or more operating rooms where care is less than 24 hours, outpatient medical care facilities for ambulatory patients (accommodating more than five such patients in each tenant space) which may render the patient incapable of unassisted self-preservation, and type II assisted living facilities. Type II assisted living facilities with five or fewer persons shall be classified as a Group R-4. Type II assisted living facilities as defined in 308.1.1 with at least six and not more than sixteen residents shall be classified as a Group I-1 facility.
- (11) Section 308.3.1 is deleted and replaced with the following:
- 308.3.1 Child care facility. A child care facility that provides care on a 24 hour basis to more than four children 2 1/2 years of age or less shall be classified as Group I-2.
- (12) Section 308.5 is deleted and replaced with the following:
- 308.5 Group I-4, day care facilities. This group shall include buildings and structures occupied by persons of any age who receive custodial care less than 24 hours by individuals other than parents or guardians, relatives by blood, marriage, or adoption, and in a place other than the home of the person cared for. A facility such as the above with four or fewer persons shall be classified as an R-3 or shall comply with the International Residential Code in accordance with Section 101.2. Places of worship during religious functions and Group E child

day care centers are not included.

- (13) Section 308.5.2 is deleted and replaced with the following:
- 308.5.2 Child care facility. A facility that provides supervision and personal care on less than a 24 hour basis for more than 100 children 2 1/2 years of age or less shall be classified as Group I-4.
- (14) Section 310.1 is deleted and replaced with the following:
- 310.1 Residential Group "R". Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classed as an Institutional Group I. Residential occupancies shall include the following:
- R-1: Residential occupancies where the occupants are primarily transient in nature (less than 30 days) including: Boarding Houses (transient) and congregate living facilities, Hotels (transient), and Motels (transient).

Exception: Boarding houses and congregate living facilities accommodating 10 persons or less shall be classified as a Residential Group R-3 or shall comply with the International Residential Code in accordance with Section 101.2.

R-2: Residential occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature, including: Apartment Houses, Boarding houses (not transient) and congregate living facilities, Convents, Dormitories, Fraternities and Sororities, Monasteries, Vacation timeshare properties, Hotels (non transient), and Motels (non transient).

Exception: Boarding houses and congregate living facilities accommodating 10 persons or less shall be classified as a Residential Group R-3 or shall comply with the International Residential Code in accordance with Section 101.2.

- R-3: Residential occupancies where the occupants are primarily permanent in nature and not classified as R-1, R-2, R-4 or I and where buildings do not contain more than two dwelling units, as applicable in Section 101.2, or adult and child care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours. Adult and child care facilities that are within a single family home are permitted to comply with the International Residential Code in accordance with Section 101.2. Areas used for day care purposes may be located in a residential dwelling unit under all of the following conditions:
- 1. Compliance with the Utah Administrative Code, R710-8, Day Care Rules, as enacted under the authority of the Utah Fire Prevention Board.

- 2. Use is approved by the State Department of Health, as enacted under the authority of the Utah Child Care Licensing Act, UCA, Sections 26-39-101 through 26-39-110, and in any of the following categories:
- a. Utah Administrative Code, R430-50, Residential Certificate Child Care Standards.
- b. Utah Administrative Code, R430-90, Licensed Family Child Care.
- 3. Compliance with all zoning regulations of the local regulator.
- R-4: Residential occupancies shall include buildings arranged for occupancy as Residential Care/Assisted Living Facilities or Residential Treatment/Support Assisted Living Facilities including more than five but not more than 16 occupants, excluding staff.

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3 except as otherwise provided for in this code or shall comply with the International Residential Code in accordance with Section 101.2.

(15) In Section 310.2 the definition for Residential Care/Assisted Living Facilities is deleted and replaced with the following:

See Section 308.1.1.

(16) A new section 421 is added as follows:

Section 421 Group E Child Day Care Centers. Group E child day care centers shall comply with Section 421.

421.1 Location at grade. Group E child day care centers shall be located at the level of exit discharge.

Exception: Child day care spaces for children over the age of 24 months may be located on the second floor of buildings equipped with automatic fire protection throughout and an automatic fire alarm system.

- 421.2 Egress. All Group E child day care spaces with an occupant load of more than 10 shall have a second means of egress. If the second means of egress is not an exit door leading directly to the exterior, the room shall have an emergency escape and rescue window complying with Section 1026.
 - (17) In Section 707.14.1 Exception 4 is deleted.
- (18) In Section (F) 902, the definition for record drawings is deleted and replaced with the following:
- (F) RECORD DRAWINGS. Drawings ("as builts") that document all aspects of a fire protection system as installed.
- (19) In Section (F) 903.2.3 condition 2 is deleted and replaced with the following:
- 2. Where a Group F-1 fire area is located more than three stories above the lowest level of fire department vehicle access; or

- (20) In Section (F) 903.2.6 condition 2 is deleted and replaced with the following:
- 2. Where a Group M fire area is located more than three stories above the lowest level of fire department vehicle access; or
- (21) Section (F) 903.2.7 is deleted and replaced with the following:
- (F)903.2.7 Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area.

Exceptions:

- 1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) constructed in accordance with the International Residential Code For One- and Two-Family Dwellings.
- 2. Group R-4 fire areas not more than 4,500 gross square feet and not containing more than 16 residents, provided the building is equipped throughout with an approved fire alarm system that is interconnected and receives it primary power from the building wiring and a commercial power system.
- (22) In Section F903.2.8 condition 2 is deleted and replaced with the following:
- 2. Where a Group S-1 fire area is located more than three stories above the lowest level of fire department vehicle access; or
- ([20]23) [In] Section (F) 903.2.9 [the exception] is deleted and replaced with the following:
- (F) 903.2.9 Group S-2. An automatic sprinkler system shall be provided throughout buildings classified as parking garages in accordance with Section 406.4 or where located beneath other groups.

Exception 1: [Enclosed p] Parking garages of less than 5,000 square feet (464 m²)located beneath Group R-3 occupancies.

Exception 2: Open parking garages not located beneath other groups if one of the following conditions is met:

- <u>a. Access is provided for fire fighting operations to</u> within 150 feet (45,720 mm) of all portions of the parking garage as measured from the approved fire department vehicle access; or
- <u>b.</u> Class I standpipes are installed throughout the parking garage.
- ([21]24) <u>In</u> Section (F) 903.2.9.1 [is deleted and replaced with the following:
- (F)903.2.9.1 Parking garages. An automatic sprinkler system shall be provided throughout buildings used for parking or storage of vehicles] the last clause "where the fire area exceeds 5,000 square feet (464 m^2) " is deleted.

- ([23]25) Section (F) 904.11 and Subsections (F) 904.11.3, (F) 904.11.3.1, (F) 904.11.4 and (F) 904.11.4.1 are deleted and replaced with the following:
- (F) 904.11 Commercial cooking systems. The automatic fire-extinguishing system for commercial cooking systems shall be of a type recognized for protection of commercial cooking equipment and exhaust systems of the type and arrangement protected. Preengineered automatic extinguishing systems shall be tested in accordance with UL 300 and listed and labeled for the intended application. The system shall be installed in accordance with this code, its listing and the manufacturer's installation instructions. Automatic fire-extinguishing systems shall be installed in accordance with the referenced standard for wetchemical extinguishing systems, NFPA 17A.

Exception: Factory-built commercial cooking recirculating systems that are tested in accordance with UL 710B and listed, labeled and installed in accordance with Section 304.1 of the International Mechanical Code.

(Subsections (F) 904.11.1 and (F) 904.11.2 remain unchanged. ([24]26) Section (F) 907.2.10 is deleted and replaced with the following:

- (F)907.2.10 Single- and multiple-station alarms. Listed single- and multiple-station smoke alarms complying with U.L. 217 shall be installed in accordance with the provision of this code and the household fire-warning equipment provision of NFPA 72. Listed single- and multiple-station carbon monoxide detectors shall comply with U.L. 2034 and shall be installed in accordance with the provisions of this code and NFPA 720.
- (F) 907.2.10.1 Smoke alarms. Single- or multiple-station smoke alarms shall be installed in the locations described in Sections (F) 907.2.10.1.1 through (F) 907.2.10.1.3.
- (F) 907.2.10.1.1 Group R-1. Single- or multiple-station smoke alarms shall be installed in all of the following locations in Group R-1:
 - 1. In sleeping areas.
- 2. In every room in the path of the means of egress from the sleeping area to the door leading from the sleeping unit.
- 3. In each story within the sleeping unit, including basements. For sleeping units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.
- (F)907.2.10.1.2 Groups R-2, R-3, R-4 and I-1. Single- or multiple-station smoke alarms shall be installed and maintained in Groups R-2, R-3, R-4 and I-1, regardless of occupant load at all of the following locations:

- 1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.
 - 2. In each room used for sleeping purposes.
- 3. In each story within a dwelling unit, including basements and cellars but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.
- (F) 907.2.10.1.3 Group I-1. Single- or multiple-station smoke alarms shall be installed and maintained in sleeping areas in occupancies in Group I-1.

Exception: Single- or multiple-station smoke alarms shall not be required where the building is equipped throughout with an automatic fire detection system in accordance with Section (F) 907.2.6.

- (F) 907.2.10.2 Carbon monoxide alarms. Carbon monoxide alarms shall be installed on each habitable level of a dwelling unit or sleeping unit in Groups R-2, R-3, R-4 and I-1 equipped with fuel burning appliances.
- (F)907.2.10.3. Power source. In new construction, required alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exception: Alarms are not required to be equipped with battery backup in Group R-1 where they are connected to an emergency electrical system.

- (F)907.2.10.4 Interconnection. Where more than one alarm is required to be installed with an individual dwelling unit in Group R-2, R-3, or R-4, or within an individual sleeping unit in Group R-1, the alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed. Approved combination smoke and carbon-monoxide detectors shall be permitted.
- (F)907.2.10.5 Acceptance testing. When the installation of the alarm devices is complete, each detector and interconnecting wiring for multiple-station alarm devices shall be tested in accordance with the household fire warning equipment provisions of NFPA 72 and NFPA 720, as applicable.
- $([\frac{25}{27})$ In Section 1008.1.8.3, a new subparagraph (5) is added as follows:

- (5) Doors in Group I-1 and I-2 occupancies, where the clinical needs of the patients require specialized security measures for their safety, approved access controlled egress may be installed when all the following are met:
- 5.1 The controlled egress doors shall unlock upon activation of the automatic fire sprinkler system or automatic fire detection system.
- 5.2 The facility staff can unlock the controlled egress doors by either sensor or keypad.
- 5.3 The controlled egress doors shall unlock upon loss of power.
- $([\frac{26}{28}])$ In Section 1009.3, Exception #4 is deleted and replaced with the following:
- 4. In Group R-3 occupancies, within dwelling units in Group R-2 occupancies, and in Group U occupancies that are accessory to a Group R-3 occupancy, or accessory to individual dwelling units in Group R-2 occupancies, the maximum riser height shall be 8 inches (203 mm) and the minimum tread depth shall be 9 inches (229 mm). The minimum winder tread depth at the walk line shall be 10 inches (254 mm), and the minimum winder tread depth shall be 6 inches (152 mm). A nosing not less than 0.75 inch (19.1 mm) but not more than 1.25 inches (32 mm) shall be provided on stairways with solid risers where the tread depth is less than 10 inches (254 mm).
- $([\frac{27}{29}])$ In Section 1009.10 Exception 6 is added as follows:
- 6. In occupancies in Group R-3, as applicable in Section 101.2 and in occupancies in Group U, which are accessory to an occupancy in Group R-3, as applicable in Section 101.2, handrails shall be provided on at least one side of stairways consisting of four or more risers.
- $([\frac{28}{30}])$ Section 1012.3 is amended to include the following exception at the end of the section:

Exception. Non-circular handrails serving an individual unit in a Group R-1, Group R-2 or Group R-3 occupancy with a perimeter greater than 6 1/4 inches (160 mm) shall provide a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of 3/4 inch (19 mm) measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16 inch (8 mm) within 7/8 inch (22 mm) below the widest portion of the profile. This required depth shall continue for at least 3/8 inch (10 mm) to a level that is not less than 1 3/4 inches (45 mm) below the tallest portion of the profile. The minimum width of the handrail above the recess shall be 1 1/4 inches (32 mm) to a maximum of 2 3/4 inches (70 mm). Edges shall have a minimum radius of 0.01 inch (0.25 mm).

- $([\frac{29}{31}]$ In Section 1013.2 Exception 3 is added as follows:
- 3. For occupancies in Group R-3 and within individual dwelling units in occupancies in Group R-2, as applicable in Section 101.2, guards shall form a protective barrier not less than 36 inches (914 mm) in height.
- $([\frac{30}{32}])$ In Section 1015.2.2 the following sentence is added at the end:

Additional exits or exit access doorways shall be arranged a reasonable distance apart so that if one becomes blocked, the others will be available.

- ([31]33) A new Section 1109.7.1 is added as follows:
- 1109.7.1 Platform (wheelchair) lifts. All platform (wheelchair) lifts shall be capable of independent operation without a key.
- $([\frac{32}{34}])$ In Section 1208.4 subparagraph 1 is deleted and replaced with the following:
- 1. The unit shall have a living room of not less than 165 square feet (15.3 $\rm m^2$) of floor area. An additional 100 square feet (9.3 $\rm m^2$) of floor area shall be provided for each occupant of such unit in excess of two.
- $([\frac{33}{35}])$ Section 1405.3 is deleted and replaced with the following:
- 1405.3 Flashing. Flashing shall be installed in such a manner so as to prevent moisture from entering the wall or to redirect it to the exterior. Flashings shall be installed at the perimeters of exterior door and window assemblies, penetrations and terminations of exterior wall assemblies, exterior wall intersections with roofs, chimneys, porches, decks, balconies and similar projections and at built-in gutters and similar locations where moisture could enter the wall. Flashing with projected flanges shall be installed on both sides and the ends of copings, under sills and continuously above projected trim. A flashing shall be installed at the intersection of the foundation to stucco, masonry, siding or brick veneer. The flashing shall be on an approved corrosion-resistant flashing with a 1/2" drip leg extending past exterior side of the foundation.
- ([34]36) In Section 1605.2.1, the formula shown as "f₂ = 0.2 for other roof configurations" is deleted and replaced with the following:
- $f_2 = 0.20 + .025 (A-5)$ for other configurations where roof snow load exceeds 30 psf
- $f_2=0$ for roof snow loads of 30 psf (1.44kN/m²) or less. Where A = Elevation above sea level at the location of the structure (ft/1000).
 - ([35]37) In Section 1605.3.1 and section 1605.3.2,

Exception number 2 in each section is deleted and replaced with the following:

- 2. Flat roof snow loads of 30 pounds per square foot (1.44 $\rm kNm^2)$ or less need not be combined with seismic loads. Where flat roof snow loads exceed 30 pounds per square foot (1.44 $\rm kNm^2)$, the snow loads may be reduced in accordance with the following in load combinations including both snow and seismic loads. $\rm W_{\rm S}$ as calculated below, shall be combined with seismic loads.
- W_{s} = (0.20 + 0.025(A-5))P $_{\text{f}}$ is greater than or equal to 0.20 P_{f}

Where

 $W_{\rm s}$ = Weight of snow to be included in seismic calculations; A = Elevation above sea level at the location of the structure (ft/1000)

 P_f = Design roof snow load, psf

For the purpose of this section, snow load shall be assumed uniform on the roof footprint without including the effects of drift or sliding. The Importance Factor, I, used in calculating P_f may be considered 1.0 for use in the formula for W_s .

 $([\frac{36}{38}])$ In Table 1607.1 number 9 is deleted and replaced with the following:

TABLE 1607.1 NUMBER 9

Occupancy or Use

Uniform Concentrated (psf) (lbs)

9. Decks, except residential Same as occupancy

servedh

9.1 Residential decks

60 psf

 $([\frac{37}{39}])$ Section 1608.1 is deleted and replaced with the following:

1608.1 General. Except as modified in section 1608.1.1, 1608.1.2, and 1608.1.3 design snow loads shall be determined in accordance with Section 7 of ASCE 7, but the design roof load shall not be less than that determined by Section 1607.

([38]40) Section 1608.1.1 is added as follows:

1608.1.1 Section 7.4.5 of Section 7 of ASCE 7 referenced in Section 1608.1 of the IBC is deleted and replaced with the following:

Section 7.4.5 Ice Dams and Icicles Along Eaves. Where ground snow loads exceed 75 psf, eaves shall be capable of sustaining a uniformly distributed load of $2p_f$ on all overhanging portions. No other loads except dead loads shall be present on the roof when this uniformly distributed load is applied. All building exits under down-slope eaves shall be protected from

sliding snow and ice.

 $([\frac{39}{3}]41)$ Section 1608.1.2 is added as follows:

1608.1.2 Utah Snow Loads. The ground snow load, P_g , to be used in the determination of design snow loads for buildings and other structures shall be determined by using the following formula: $P_g = (P_o^2 + S^2(A-A_o)^2)^{0.5}$ for A greater than A_o , and $P_g = P_o$ for A less than or equal to A_o .

WHERE

 P_{σ} = Ground snow load at a given elevation (psf)

 P_o = Base ground snow load (psf) from Table No. 1608.1.2(a)

S = Change in ground snow load with elevation (psf/100 ft.) From Table No. 1608.1.2(a)

A = Elevation above sea level at the site (ft./1000)

 A_o = Base ground snow elevation from Table 1608.1.2(a) (ft./1000)

The building official may round the roof snow load to the nearest 5 psf. The ground snow load, $P_{\rm g}$, may be adjusted by the building official when a licensed engineer or architect submits data substantiating the adjustments. A record of such action together with the substantiating data shall be provided to the division for a permanent record.

The building official may also directly adopt roof snow loads in accordance with Table 1608.1.2(b), provided the site is no more than 100 ft. higher than the listed elevation.

Where the minimum roof live load in accordance with section 1607.11 is greater than the design roof snow load, such roof live load shall be used for design, however, it shall not be reduced to a load lower than the design roof snow load. Drifting need not be considered for roof snow loads less than 20 psf.

 $([\frac{40}{42}]$ Table 1608.1.2(a) and Table 1608.1.2(b) are added as follows:

TABLE NO. 1608.1.2(a)
STATE OF UTAH - REGIONAL SNOW LOAD FACTORS

COUNTY	P_{\circ}	S	A_{\circ}
Beaver	43	63	6.2
Box Elder	43	63	5.2
Cache	50	63	4.5
Carbon	43	63	5.2
Daggett	43	63	6.5
Davis	43	63	4.5
Duchesne	43	63	6.5
Emery	43	63	6.0
Garfield	43	63	6.0

Grand	36	63	6.5
Iron	43	63	5.8
Juab	43	63	5.2
Kane	36	63	5.7
Millard	43	63	5.3
Morgan	57	63	4.5
Piute	43	63	6.2
Rich	57	63	4.1
Salt Lake	43	63	4.5
San Juan	43	63	6.5
Sanpete	43	63	5.2
Sevier	43	63	6.0
Summit	86	63	5.0
Tooele	43	63	4.5
Uintah	43	63	7.0
Utah	43	63	4.5
Wasatch	86	63	5.0
Washington	29	63	6.0
Wayne	36	63	6.5
Weber	43	63	4.5

TABLE NO. 1608.1.2(b)
RECOMMENDED SNOW LOADS FOR SELECTED UTAH CITIES AND TOWNS(2)

		Roof Snow Load (PSF)	Ground Snow Load (PSF)
Beaver County			
Beaver	5920 ft.	43	62
Box Elder County			
Brigham City	4300 ft.	30	43
Tremonton	4290 ft.	30	43
Cache County			
Logan	4530 ft.	35	50
Smithfield	4595 ft.	35	50
Carbon County			
Price	5550 ft.	30	43
Daggett County			
Manila	5377 ft.	30	43
Davis County			
Bountiful	4300 ft.	30	43
Farmington	4270 ft.	30	43
Layton	4400 ft.	30	43
Fruit Heights	4500 ft.	40	57
Duchesne County			
Duchesne	5510 ft.	30	43

Roosevelt Emery County	5104	ft.	30	43
Castledale	5660	ft.	30	43
Green River	4070		25	36
Garfield County	10,0	10.	20	00
=	6600	ft.	30	43
Grand County				
Moab	3965	ft.	25	36
Iron County				
Cedar City	5831	ft.	30	43
Juab County				
Nephi	5130	ft.	30	43
Kane County				
Kanab	5000	ft.	25	36
Millard County				
Millard	5000	ft.	30	43
Delta	4623	ft.	30	43
Morgan County				
Morgan	5064	ft.	40	57
Piute County				
Piute	5996	ft.	30	43
Rich County				
Woodruff	6315	ft.	40	57
Salt Lake County				
Murray	4325	ft.	30	43
Salt Lake City	4300	ft.	30	43
Sandy	4500	ft.	30	43
West Jordan	4375	ft.	30	43
West Valley	4250	ft.	30	43
San Juan County				
2	6200	ft.	30	43
Monticello	6820	ft.	35	50
Sanpete County				
Fairview	6750		35	50
Mt. Pleasant			30	43
Manti	5740		30	43
-	5540		30	43
Gunnison	5145	ft.	30	43
Sevier County				
Salina	5130		30	43
Richfield	5270	ft.	30	43
Summit County				
Coalville	5600		60	86
Kamas	6500		70	100
Park City	6800		100	142
-	8400		162	231
Summit Park	7200	it.	90	128

5100	ft.	30	43
5280	ft.	30	43
4500	ft.	30	43
4650	ft.	30	43
5000	ft.	30	43
5000	ft.	30	43
4720	ft.	30	43
5630	ft.	60	86
7			
5209	ft.	25	36
4550	ft.	25	36
3460	ft.	20	29
3700	ft.	25	36
2850	ft.	15 (1)	21
2750	ft.	15 (1)	21
7080	ft.	30	43
4308	ft.	25	36
4500	ft.	40	57
4350	ft.	30	43
	5280 4500 4650 5000 4720 5630 75209 4550 3460 3700 2850 2750 7080 4308	5100 ft. 5280 ft. 4500 ft. 4650 ft. 5000 ft. 5000 ft. 4720 ft. 5630 ft. 7 5209 ft. 4550 ft. 3460 ft. 3700 ft. 2850 ft. 2750 ft. 7080 ft. 4308 ft. 4308 ft. 4300 ft.	5280 ft. 30 4500 ft. 30 4650 ft. 30 5000 ft. 30 5000 ft. 30 4720 ft. 30 5630 ft. 60 7 5209 ft. 25 4550 ft. 25 3460 ft. 20 3700 ft. 25 2850 ft. 15 (1) 2750 ft. 30 4308 ft. 40

NOTES

- (1) The IBC requires a minimum live load See 1607.11.2.
- (2) This table is informational only in that actual site elevations may vary. Table is only valid if site elevation is within 100 feet of the listed elevation.
 - ([41]43) Section 1608.1.3 is added as follows:
- $1608.\overline{1.3}$ Thermal Factor. The value for the thermal factor, C_t , used in calculation of p_f shall be determined from Table 7.3 in ASCE 7.

Exception: Except for unheated structures, the value of $C_{\rm t}$ need not exceed 1.0 when ground snow load, $P_{\rm g}$ is calculated using Section 1608.1.2 as amended.

- ([42]44) Section 1608.2 is deleted and replaced with the following:
- 1608.2 Ground Snow Loads. The ground snow loads to be used in determining the design snow loads for roofs in states other than Utah are given in Figure 1608.2 for the contiguous United States and Table 1608.2 for Alaska. Site-specific case studies shall be made in areas designated CS in figure 1608.2. Ground snow loads for sites at elevations above the limits

indicated in Figure 1608.2 and for all sites within the CS areas shall be approved. Ground snow load determination for such sites shall be based on an extreme value statistical analysis of data available in the vicinity of the site using a value with a 2-percent annual probability of being exceeded (50-year mean recurrence interval). Snow loads are zero for Hawaii, except in mountainous regions as approved by the building official.

- ([43]45) In Section 1609.1.1 a new exception number 5 is added as follows:
- 5. The wind design procedure as found in Section 1616 through 1624 of the 1997 Uniform Building Code may be used as an alternative wind design procedure provided that the building or component being designed meets the limits for the Simplified Method as defined in ASCE 6.4.1.1 and 6.4.1.2 of ASCE 7. The Importance Factor, I, shall be determined in accordance with Table 6-1 of ASCE 7.
 - ([44]46) Section 1613.7 is added as follows:
- 1613.7 ASCE 12.7.2 and 12.14.18.1 of Section 12 of ASCE 7 referenced in Section 1613.1, Definition of W, Item 4 is deleted and replaced with the following:
- 4. Where the flat roof snow load, P_f , exceeds 30 psf, the snow load included in seismic design shall be calculated, in accordance with the following formula: $W_s = (0.20 + 0.025 (A-5)) P_f$ is greater than or equal to 0.20 P_f

WHERE:

 W_s = Weight of snow to be included in seismic calculations; A = Elevation above sea level at the location of the structure (ft/1000)

 P_f = Design roof snow load, psf

For the purposes of this section, snow load shall be assumed uniform on the roof footprint without including the effects of drift or sliding. The Importance Factor, I, used in calculating P_f may be considered 1.0 for use in the formula for W_s .

- ([45]47) A new Section 1613.8 is added as follows: 1613.8 ASCE 7, Section 13.5.6.2.2 paragraph (e) is modified to read as follows:
- (e) Penetrations shall have a sleeve or adapter through the ceiling tile to allow for free movement of at least 1 inch $(25\ \text{mm})$ in all horizontal directions.

Exceptions:

- 1. Where rigid braces are used to limit lateral deflections.
- 2. At fire sprinkler heads in frangible surfaces per NFPA 13.
- $([\frac{46}]{48})$ Section 1805.5 is deleted and replaced with the following:

1805.5 Foundation walls. Concrete and masonry foundation walls shall be designed in accordance with Chapter 19 or 21, respectively. Foundation walls that are laterally supported at the top and bottom and within the parameters of Tables 1805.5(1) through 1805.5(5) are permitted to be designed and constructed in accordance with Sections 1805.5.1 through 1805.5.5. Concrete foundation walls may also be constructed in accordance with Section 1805.5.8.

 $([47]\underline{49})$ A new section 1805.5.8 is added as follows: 1805.5.8 Empirical foundation design. Group R, Division 3 Occupancies three stories or less in height, and Group U Occupancies, which are constructed in accordance with Section 2308, or with other methods employing repetitive wood-frame construction or repetitive cold-formed steel structural member construction, shall be permitted to have concrete foundations constructed in accordance with Table 1805.5(6).

([48]50) Table 1805.5(6) is added as follows:

Table 1805.5(6), entitled "Empirical Foundation Walls, dated January 1, 2007, published by the Department of Commerce, Division of Occupational and Professional Licensing is hereby adopted and incorporated by reference. Table 1805.5(6) identifies foundation requirements for empirical walls.

 $([\frac{49}{51}]\underline{51})$ A new section 2306.1.[4]5 is added as follows: 2306.1.[4]5 Load duration factors. The allowable stress increase of 1.15 for snow load, shown in Table 2.3.2, Frequently Used Load Duration Factors, C_d , of the National Design Specifications, shall not be utilized at elevations above 5,000 feet (1524 M).

([50]52) In Section 2308.6 the following exception is added:

Exception: Where foundation plates or sills are bolted or anchored to the foundation with not less than 1/2 inch (12.7 mm) diameter steel bolts or approved anchors, embedded at least 7 inches (178 mm) into concrete or masonry and spaced not more than 32 inches (816 mm) apart, there shall be a minimum of two bolts or anchor straps per piece located not less than 4 inches (102 mm) from each end of each piece. A properly sized nut and washer shall be tightened on each bolt to the plate.

 $([\frac{51}{2}] \underline{53})$ Section 2506.2.1 is deleted and replaced with the following:

2506.2.1 Other materials. Metal suspension systems for acoustical and lay-in panel ceilings shall conform with ASTM C635 listed in Chapter 35 and Section 13.5.6 of ASCE 7-05, as amended in Section 1613.8, for installation in high seismic areas.

 $([\frac{52}{2}]\frac{54}{})$ In Section 2902.1, the title for Table 2902.1 is deleted and replaced with the following and footnote e is added

as follows: Table 2902.1, Minimum Number of Required Plumbing Facilities^{a, e}.

FOOTNOTE: e. When provided, in public toilet facilities there shall be an equal number of diaper changing facilities in male toilet rooms and female toilet rooms.

 $([\frac{53}{5}]\frac{55}{5})$ Section 3006.5 Shunt Trip, the following exception is added:

Exception: Hydraulic elevators and roped hydraulic elevators with a rise of 50 feet or less.

([54]56) A new section 3403.2.4 is added as follows:

3403.2.4 Parapet bracing, wall anchors, and other appendages. Buildings constructed prior to 1975 shall have parapet bracing, wall anchors, and appendages such as cornices, spires, towers, tanks, signs, statuary, etc. evaluated by a licensed engineer when said building is undergoing reroofing, or alteration of or repair to said feature. Such parapet bracing, wall anchors, and appendages shall be evaluated in accordance with 75% of the seismic forces as specified in Section 1613. When allowed by the local building official, alternate methods of equivalent strength as referenced in Subsection R156-56-701(2) will be considered when accompanied by engineer sealed drawings, details and calculations. When found to be deficient because of design or deteriorated condition, the engineer shall prepare specific recommendations to anchor, brace, reinforce, or remove the deficient feature.

EXCEPTIONS:

- 1. Group R-3 and U occupancies.
- 2. Unreinforced masonry parapets need not be braced according to the above stated provisions provided that the maximum height of an unreinforced masonry parapet above the level of the diaphragm tension anchors or above the parapet braces shall not exceed one and one-half times the thickness of the parapet wall. The parapet height may be a maximum of two and one-half times its thickness in other than Seismic Design Categories D, E, or F.
- ([55]57) Section 3406.4 is deleted and replaced with the following:
- 3406.4 Change in Occupancy. When a change in occupancy results in a structure being reclassified to a higher Occupancy Category (as defined in Table 1604.5), or when such change of occupancy results in a design occupant load increase of 100% or more, the structure shall conform to the seismic requirements for a new structure.

Exceptions:

1. Specific seismic detailing requirements of this code or ASCE 7 for a new structure shall not be required to be met where it can be shown that the level of performance and seismic safety

is equivalent to that of a new structure. Such analysis shall consider the regularity, overstrength, redundancy and ductility of the structure within the context of the existing and retrofit (if any) detailing providing. Alternatively, the building official may allow the structure to be upgraded in accordance with referenced sections as found in Subsection R156-56-701(2).

- 2. When a change of use results in a structure being reclassified from Occupancy Category I or II to Occupancy Category III and the structure is located in a seismic map area where S_{DS} is less than 0.33, compliance with the seismic requirements of this code and ASCE 7 are not required.
- 3. Where design occupant load increase is less than 25 occupants and the Occupancy Category does not change.

 $([\frac{56}]58)$ The exception in 3409.1 is deleted and replaced with the following:

Exception: Type B dwelling or sleeping units required by section 1107 are not required to be provided in existing buildings and facilities, except when an existing occupancy is changed to R-2.

 $([\frac{57}{2}]59)$ In Section 3409.4, number 7 is added as follows:

7. When a change of occupancy in a building or portion of a building results in a Group R-2 occupancy as determined in section 1107.6.2, not less than 20 percent of the dwelling or sleeping units shall be Type B dwelling or sleeping units. These dwelling or sleeping units may be located on any floor of the building provided with an accessible route. Two percent, but not less than one, of the dwelling or sleeping units shall be Type A dwelling units.

 $([58]\underline{60})$ The following referenced standard is added under NFPA in chapter 35:

TABLE

Number Title Section number 720-05 Recommended Practice for the 907.2.10,

Installation of Household Carbon Monoxide (CO) Warning Equipment

KEY: contractors, building codes, building inspection, licensing

Date of Enactment or Last Substantive Amendment: [January 1, 12007

Notice of Continuation: May 16, 2002

Authorizing, and Implemented or Interpreted Law: 58-1-106(1)(a); 58-1-202(1)(a); 58-56-1; 58-56-4(2); 58-56-6(2)(a)